


**NJ ASK  
Practice**

**DIRECTIONS FOR QUESTIONS 1 THROUGH 5:** Read each question. Circle the letter of the answer you choose. You may use a calculator for these questions.

- 1** Kyle is arranging the letters of his name. How many different arrangements can he make if he uses each letter exactly once?
- A. 16  
B. 24  
C. 48  
D. 256
- 2** A computer programmer is trying to come up with two-digit passwords using only the digits 0, 2, 4, and 6. If the programmer uses permutations without replacements, how many two-digit passwords are possible?
- A. 6  
B. 7  
C. 8  
D. 9
- 3** Mikaela, Nancy, Patti, and Ramona all want the two parts that are left in the play. There is a lead and a supporting role remaining. In how many ways can the director, cast the two parts?
- A. 4  
B. 8  
C. 12  
D. 24

4

Using the letters in the word BOAT, how many four-letter arrangements are possible if each letter can only be used once and if there must be a vowel in the first and last places?

- A. 4  
B. 6  
C. 8  
D. 12

**NJ ASK Tip**

Make an organized list or tree diagram if necessary.

- 5** There are 5 people that will attend a meeting. There are only 3 chairs. In how many different ways can the people be seated?
- A. 20                      C. 30  
B. 25                      D. 60

**DIRECTIONS FOR QUESTION 6:** Read the question. Enter your answer on the blank line. You may NOT use a calculator.

6

Deval wants to arrange the letters in his name, so that the first and last letters are vowels. How many different arrangements can Deval make if he uses each letter exactly once?

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